NPL Site Narrative for Standard Chlorine Chem. Co., Inc.

STANDARD CHLORINE CHEMICAL COMPANY, INC.
Kearny, New Jersey

Federal Register Notice: April 30, 2003

The Standard Chlorine Chemical Company, Inc. (Standard Chlorine), site is located in an industrial area along the tidally-influenced Hackensack River in Kearny Township, New Jersey. Chemical manufacturing and/or processing occurred at the 25-acre facility from the early 1900s to the 1990s. Operations included the production and refinement of naphthalene, the storage and packaging of 1,4-dichlorobenzene moth preventatives and deodorizers, the production of dye carriers, and the processing of liquid petroleum naphthalene for the manufacture of moth balls and flakes, as well as several other manufacturing activities.

In December 2001, New Jersey Department of Environmental Protection (NJDEP) requested that EPA evaluate the Standard Chlorine site for listing on the National Priorities List due to the complex environmental issues present at the site and the inability of the responsible parties to address the issues. The NJDEP indicated that Standard Chlorine had not completed Remedial Investigation activities and was non-compliant with the terms of an 1989 Administrative Consent Order (ACO). The NJDEP has terminated their ACO with Standard Chlorine.

Several potential source areas exist at the Standard Chlorine site. The primary areas of concern include contaminated soils throughout the site and two lagoons located on the eastern portion of the facility property. Another concern is an area of PCB-contaminated soils and concrete in the vicinity of a former transformer located adjacent to Building 2 on the western portion of the property. All of these areas appear to ultimately drain into the Hackensack River via three probable points of entry: a drainage pipe along the northern property boundary, a drainage ditch that runs along the southern property boundary, and overland runoff that flows directly from the facility property to the river. Free phase product in the soils and groundwater also appears to discharge directly to surface water bodies. Tanks and drums containing (or at one time contained) various site-related hazardous substances, including dioxin contaminated asbestos, also are present at the facility. In addition, contaminated fill material from non-site related chromium ore processing activities is present on the site property, as well as on other properties in the Hackensack Meadowlands.

The predominant hazardous substances associated with the lagoons and surrounding contaminated soils include: benzene, dichlorobenzenes, chlorobenzene, trichlorobenzenes, naphthalene, and dioxin (TCDD). In addition, PCB-1260 was detected at 9300 milligrams per kilogram (mg/kg) in concrete chips taken from the vicinity of the former transformer, and at lesser concentrations (0.12 to 0.29 mg/kg) in soil samples collected directly beneath the concrete pavement.

Data from sampling events conducted between 1992 and 2002 indicate that a release of site-related hazardous substances has occurred to the Hackensack River and adjacent wetlands. Dioxins, Dichlorobenzenes, 1,2,4-trichlorobenzene, naphthalene, benzene, and chlorobenzene, as well as several other semivolatile and volatile organic compounds, have been detected at varying levels in these samples. During the 2002 EPA sampling event, dioxin (2,3,7,8-TCDD) was detected at 96.1 nanograms per kilogram (ng/kg) in a sediment sample taken in the Hackensack River. Surface water samples taken from the outfall at the point of discharge to the Hackensack show concentrations of

naphthalene at 45 micrograms per kilogram (ug/kg) and 1,2,4-trichlorobenzene at 12 ug/kg. A seep was also observed entering the Hackensack River from the sediment southeast of the outfall where the southern drainage ditch confluences with the Hackensack River. The seep was black in color with observed sediment. Chemical analysis of the seep indicates the presence of 1,4-dichlorobenzene at 2 ug/kg.

Warnings pertaining to the consumption of some fish (particularly crab) and a health advisory have been issued for the Hackensack River due to PCB and dioxin contamination, originating in part from the Standard Chlorine site. Reportedly, however, fishing still occurs along the river. The site lies in the Hackensack Meadowlands which has been identified by the US Fish and Wildlife Service as a Significant Habitat Complex of the New York Bight Watershed at the request of the US EPA's New York - New Jersey Harbor Estuary Program, and may be a habitat for some state or Federal designated endangered and/or threatened species. Releases of site-related hazardous substances to ground water also have been documented since at least the early 1980s.

[The description of the site (release) is based on information available at the time the site was evaluated with the HRS. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at http://www.atsdr.cdc.gov/toxfaq.html or by telephone at 1-888-42-ATSDR or 1-888-422-8737.
